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TITLE OF INVENTION: USE OF NOVEL AGENTS INDUCING CELL DEATH IN SYNERGY WITH INTERFERONS

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## UNMARKED, AMENDED SET OF CLAIMS

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12) A method of inducing the death of undesirable cells and/or stimulate an immune response comprising the administration to a patient of a) a substance which promotes the targeting of the PML protein towards the nuclear bodies and /or PML stabilization and b) the PML protein and/or an agent inducing the over expression of the PML protein.

13) A method of claim 12 wherein the substance which promotes the targeting of the PML protein towards the nuclear bodies and /or PML stabilization is selected from the group consisting of 1) an arsenic compound; 2) a compound having the same biological properties as arsenic; 3) caspase inhibitors; and 4) caspase substrates.

14) A method of claim 13 wherein said arsenic compound is arsenic trioxide.

15) A method of claim 13 where said caspase inhibitor is zVAD.

B<sub>1</sub>  
16) A method of claim 12 wherein said agent inducing the over expression of the PML protein is an interferon.

17) A method of claim 16 wherein said interferon is selected from the group consisting of  $\alpha$ -interferon,  $\beta$ -interferon and  $\gamma$ -interferon.

B<sub>2</sub>  
18) A method of claim 12 wherein administration of a and b is simultaneous or sequential.

19) A method of inducing the death of undesirable cells and/or stimulate an immune response comprising the administering to a patient a) an arsenic compound, compound having the same biological properties as arsenic, caspase inhibitors or a caspase substrate; and b) an interferon.

20) A method of claim 12 wherein the administration of a and b is simultaneous or sequential.

21) A method of inducing the death of undesirable cells in vitro comprising bringing undesirable cells in contact with a) an arsenic compound, a compound having the same biological properties as arsenic, a caspase inhibitors or a caspase substrate and b) a substance being associated with the PML protein and/or an agent inducing the expression of the PML protein.

22) A pharmaceutical composition comprising:

- a. at least one caspase inhibitor and/or substrate;
- b. at least one arsenic compound or compound having the same biological properties as arsenic;
- c. the PML protein;
- d. at least one agent inducing the over-expression of the PML protein; and
- e. a pharmaceutically acceptable vehicle.

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23) A Kit comprising:

- a. A composition comprising at least one caspase inhibitor and/or substrate and a pharmaceutically acceptable carrier;
- b. A composition comprising at least one arsenic compound or one compound having the same properties as arsenic and a pharmaceutically acceptable carrier;
- c. A composition comprising the PML protein and a pharmaceutically acceptable carrier; and;
- d. A composition comprising of at least one agent inducing the over expression of the PML protein and a pharmaceutically acceptable carrier.

24) A method of inducing the death of undesirable cells and/or of stimulation an immune reaction comprising administering to a patient a caspase inhibitor and/or a caspase substrate.

25) A method of claim 24 wherein said caspase inhibitor is zVAD.